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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,382	09/19/2003	Jane Campbell Mazzagatti	TN188A	8502

7590 02/10/2005

Attn: Michael B. Atlass  
Unisys Corporation  
Unisys Way, MS/E8-114  
Blue Bell, PA 19424-0001

EXAMINER
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AL HASHEMI, SANA A

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*Supplemental*  
**Office Action Summary**

Application No.

10/666,382

Applicant(s)

MAZZAGATTI, JANE CAMPBELL

Examiner

Sana Al-Hashemi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Supplemental

### **DETAILED ACTION**

Claim Status: 36-75 are rejected. Claim 1, is cancelled.

#### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claim 1, drawn to an generating a data tree, classified in class 707, subclass 102.
- II. Claims 36-75, drawn to a method of evaluating a collection of data, classified in class 707, subclass 104.1.

Inventions I, and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the subcombination as claimed does not require the particular subcombination as claimed for patentability, and (2) that the combination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the subcombination (I) as claimed in building a hierarchical database does not require combination (II) as claimed because building a hierarchical database does not require the collection of data evaluation as claimed in combination II. The combination (II) has separate utility such as the evaluating a collection of data does not have to be tied to only that specific data structure.

Therefore, the inventions are distinct; however, they could be usable together.

2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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Because these inventions are distinct for the reasons given above and the search required for I is not required for II, respectively, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

A telephone call was made to Michael Attass on February 3, 2005. An election was made with traverse to prosecute the invention of combination II, claims 36-75. Claim 1 is canceled.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

This Office action sets a one-month period for reply (restriction requirement), the applicant may obtain a two-month extension of time under 37 CFR 1.136(a) before being subject to a reduction of patent term adjustment under 35 U.S.C. 154(b)(2)(C)(ii) and 37 CFR 1.704(b).

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter.

Claims 36-75 are rejected under 35 U.S.C. 101 because none of the independent claims in conjunction with all dependent claims are statutory.

The claimed subject matter is directed to a “manipulation of an abstract idea ”. As such, the claimed subject matter is not statutory and not eligible for patent protection.

No abstract idea can be used, as a practical matter, without establishing and substituting values for the variable expressed therein. Substitution of values dictated by the formula has thus been viewed as a form of mathematical step. If the steps of gathering and substituting values were alone sufficient, every mathematical equation, formula, or algorithm having any practical used would be per se subject to patenting as a “process” under 101. Consideration of whether the substitution of specific values is enough to convert the disembodied ideas present in the formula into an embodiment of those ideas, or into an application of the formula, is foreclosed by the current state of law.

For subject matter to be statutory, the claimed process must be limited to a practical application of the abstract idea or mathematical algorithm in the technology arts. See *Alappat*, 33 F. 3d at 1543, 31 USPQ 2d at 1556-57 (quoting *Diamond v. Diehr*, 450 U.S. at 192, 209 USPQ at 10). See also *Alappat* 33 F. 3d at 1569, 31 USPQ2d at 1578-79 (Newman, J., concurring)(“unpatentability of the principle does not defeat patentability of its practical application”) (citing *O’ Reilly v. Mores*, 56 U.S. (15 how.) at 114-19). A claim is limited to a practical application when the method, as claimed, produces concrete, tangible and useful results; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. See *AT&T*, 172 F.3d at 1358, 50USPQ2d at 1452.

For a claimed invention to be statutory, the claimed invention must be within the technological art. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological art fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a method claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In *Bowman* (Ex parte *Bowman*, 61 USPQ2d 1665, 1671 (BD. Pat. App. & Inter. 2001) (Unpublished)), the board affirmed the rejection under U.S.C. 101 as being directed to non-statutory subject matter. Although *Bowman* discloses transforming physical media into a chart and physically plotting a point on said chart, the Board held that the claimed invention is nothing more than an abstract idea, which is not tied to any technological art or environment.

In the present case, claims 36, 46, 57, recite a manipulation of an abstract idea without providing any results like what is the result of calculating the probability, or where the calculation will be used or what purpose it will serve? And claims 68, 73, and 74, recite a single abstract idea, which does not provide any results. In other words, since the claimed invention, as a whole, is not within the technological arts as explained above, these claims only constitute


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an idea and does not apply, involve, use, or advance the technological arts, thus, it is deemed to be directed to non-statutory subject matter.

***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sana Al-Hashemi whose telephone number is (571) 272-4013. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023. Any response to this office action should be mailed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231. Or telefax at phone number (703) 746-7416. For formal or draft communications, please label "PROPOSED" or "DRAFT". Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6<sup>th</sup> Floor Receptionist, Arlington, Virginia. 22202.

Sana Al-Hashemi  
Patent Examiner  
Technology Center 2100  
February 3, 2005

  
ALFORD KINDRED  
PRIMARY EXAMINER